

## Merge k Sorted Lists [\(View\)](#)

You are given an array of `k` linked-lists `lists`, each linked-list is sorted in ascending order.

*Merge all the linked-lists into one sorted linked-list and return it.*

### Example 1:

**Input:** `lists = [[1,4,5],[1,3,4],[2,6]]`

**Output:** `[1,1,2,3,4,4,5,6]`

**Explanation:** The linked-lists are:

```
[  
  1->4->5,  
  1->3->4,  
  2->6  
]
```

merging them into one sorted list:

`1->1->2->3->4->4->5->6`

### Example 2:

**Input:** `lists = []`

**Output:** `[]`

### Example 3:

**Input:** `lists = [[]]`

**Output:** `[]`

### Constraints:

- `k == lists.length`
- `0 <= k <= 10^4`
- `0 <= lists[i].length <= 500`
- `-10^4 <= lists[i][j] <= 10^4`
- `lists[i]` is sorted in **ascending order**.
- The sum of `lists[i].length` won't exceed `10^4`.